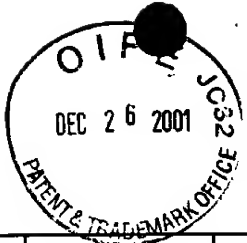


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Applicant(s) HENRY C. LIN, M. D., MANHATTAN BEACH, CA.

CONTINUING DATA AS CLAIMED BY APPLICANT-

THIS APPLN IS A CIP/OF 09/359,583 07/22/99  
WHICH IS A CIP/OF 08/832,307 04/03/97 PAT 5,977,175  
WHICH IS A CIP/OF 08/442,843 05/17/95 ABN

IF REQUIRED, FOREIGN FILING LICENSE GRANTED 11/12/99 \*\* SMALL ENTITY \*\*  
TITLE  
METHOD AND COMPOSITIONS FOR IMPROVING DIGESTION AND ABSORPTION IN THE  
SMALL INTESTINE

PRELIMINARY CLASS: 424

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# METHODS AND COMPOSITIONS FOR IMPROVING DIGESTION AND ABSORPTION IN THE SMALL INTESTINE

This application is a continuation-in-part of U.S. Patent Application Serial No. 09/359,583, filed on July 22, 1999, which is a continuation of U.S. Patent Application Serial No. 08/832,307, filed on April 3, 1997, which is a continuation of U.S. Patent Application Serial No. 08/442,843, filed on May 17, 1995.

## FIELD OF THE INVENTION

The present invention relates to methods and pharmaceutical compositions for controlling the presentation of luminal content in the gastrointestinal tract.

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## BACKGROUND OF THE INVENTION

A principal function of the gastrointestinal tract is to process and absorb food. The stomach, which is both a storage and digestive organ, works to optimize the conditions for the digestion and absorption of food in the small intestine. Following the stomach and preceding the large bowel (colon) is the small intestine, which comprises three regions: the duodenum, jejunum, and ileum. A major function of the small intestine is one of absorption of digested nutrients.

The passage of a meal through the gastrointestinal tract, which leads to digestion and absorption of nutrients, is controlled by a complex system of inhibitory and stimulatory motility mechanisms which are set in motion by the composition of the meal ingested. Specific receptors for fats and proteins, and the osmolality, acidity and particle size of the meal activate propulsive and inhibitory reactions, which modulate transit and thus absorption. In normal human subjects, the mechanisms that regulate gastrointestinal transit can, under some circumstances, be sensitized or desensitized in response to the subject's recent dietary history. (K.M. Cunningham *et al.*, *Gastrointestinal adaptation to diets of differing fat composition in human volunteers*, Gut 32(5):483-86 [1991]).

The rate of transit through the small intestine is of great significance for the rate and extent of absorption from the small intestine. Disruption of the normal



APPLICATION

for

UNITED STATES LETTERS PATENT

on

METHODS AND COMPOSITIONS FOR IMPROVING DIGESTION AND  
ABSORPTION IN THE SMALL INTESTINE

by

Henry C. Lin, M.D.

Number of Drawings: 0

Docket No.: P07 43084

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